

This listing of claims replaces all prior versions, and listings, of claims in this application.

Listing of Claims:

Claim 1. (Currently amended) A purified anthrax toxin B moiety of a pore-forming binary A-B toxin, wherein said B moiety comprises an amino acid sequence that is 95% identical to SEQ ID NO:8, and includes a D425K mutation, that inhibits its pore-forming ability and, wherein said mutation is not the mutation of Phe313, Phe314, or Asp315 of anthrax protective antigen or corresponding residues in B moieties other than anthrax protective antigen.

Claims 2-5. (Cancelled)

Claim 6. (Currently amended) A vaccine An immunogenic composition comprising a purified anthrax toxin B moiety of a pore-forming binary A-B toxin or a fragment thereof in a pharmaceutically acceptable carrier, wherein said B moiety comprises SEQ ID NO:8. a mutation that inhibits its pore-forming ability and, wherein said mutation is not the mutation of Phe313, Phe314, or Asp315 of anthrax protective antigen or corresponding residues in B moieties other than anthrax protective antigen

Claims 7-42 (Cancelled)

Claims 43-44 (Withdrawn)

Claims 45-48 (Cancelled)

Claim 49 (Withdrawn)

Claims 50-51 (Cancelled)

Claim 52. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises an amino acid sequence that is 95% identical to SEQ ID NO:10 and includes a K397D + D425K double mutation in said B moiety.

Claim 53. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises an amino acid sequence that is 95% identical to SEQ ID NO:11 and includes a K395D + K397D + D425K + D426K quadruple mutation in said B moiety.

Claim 54. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises an amino acid sequence that is 95% identical to SEQ ID NO:13 and includes a K397D + D425K + F427A triple mutation in said B moiety.

Claim 55. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises an amino acid sequence that is 95% identical to SEQ ID NO:16 and includes a K397D + D425K + F427A + deletion of amino acids 302-325 (Δ D2L2) quadruple mutation in said B moiety.

Claim 56. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises SEQ ID NO:8.

Claim 57. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises SEQ ID NO:10.

Claim 58. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises SEQ ID NO:11.

Claim 59. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises SEQ ID NO:13.

Claim 60. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises SEQ ID NO:16.

Claim 61. (New) An immunogenic composition comprising a purified anthrax toxin B moiety in a pharmaceutically acceptable carrier, wherein said B moiety

comprises SEQ ID NO:10.

Claim 62. (New) An immunogenic composition comprising a purified anthrax toxin B moiety in a pharmaceutically acceptable carrier, wherein said B moiety comprises SEQ ID NO:11.

Claim 63. (New) An immunogenic composition comprising a purified anthrax toxin B moiety in a pharmaceutically acceptable carrier, wherein said B moiety comprises SEQ ID NO:13.

Claim 64. (New) An immunogenic composition comprising a purified anthrax toxin B moiety in a pharmaceutically acceptable carrier, wherein said B moiety comprises SEQ ID NO:16.